Compounds of Uranyl With 1,10-Phenanthroline and 2,2'-Dipyridyl SOV/78-4-10-15/40

U....N bond. In this case compounds of uranyl with 2,2'-dipyridyl are formed in which the latter acts as cation. The molecular conductivity of these compounds in water and methyl alcohol is presented in table 1 and table 2. There are 1 figure, 2 tables, and 7 references, 1 of which is Soviet.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences, USSR)

SUBMITTED: September 17, 1958

Card 2/2

ZHABOTINSKIY, M.Ye.; RUDNITSKIY, [redacted] TSAPKIN, V.V.; ELLERT, G.V.

Transfer of excitation from a crystal lattice to rare earth ions. Zhur.eksp. i teor.fiz. 49 no.6:1689-1694 D '65. (MIRA 19:1)

1. Institut radiotekhniki i elektroniki AN SSSR. Submitted June 14, 1965.

GOLOVNYA, V.A., doktor khim. nauk; ELLERT, G.V., kand. khim. nauk; SHUBOCHKIN, L.K., kand. khim. nauk; SHCHELOKOV. R N., kand. khim. nauk; TSAPKINA, I.V., kand. khim. nauk; TRAGGETM, Ye.N., kand. khim. nauk; MAKAROV, V.P., doktor khim. nau, [deceased]; ALTKHANOVA, Z.M.; DYATKINA, M.Ye., doktor khim. nauk; MIKHAYLOV, Yu.N.; TSAPKIN,V.V.,kand.khim.nauk; BOLOTOVA,G.T.,kand.khim.nauk; CHERNYAYEV,V.A.,doktor khim.nauk; KORCHEMNAYA,Ye.K., red.

[Complex compounds of uranium] Kompleksnye soedineniia urana. Moskva, Izd-vo "Nauka," 1964. 488 p. (MIRA 17:7)

1.Akademiya nauk SSSR. Institut obshchey i neorganicheskoy khimii. 2. Laboratoriya khimii kompleksnykh soyedineniy aktinidov Instituta obshchey i neorganicheskoy khimii AN SSSR (for all except Korchemnaya).

MARKOV, V.P.; TSAPKIN, V.V.

Physicochemical properties of some uranyl compounds with 1, 10-phenanthroline and 2, 2'-bipyridine. Zhur.neorg.khim. 7 no.3:490-497 Mr '62. (MIRA 15:3)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova AN SSSR.
(Uranyl compounds) (Phenanthroline) (Bipyridine)

[redacted], Yu.V., [redacted]

Chlorinebromine complex compounds of [redacted].
Zhur. neorg. khim. [redacted] no.7:1572-1580 Jl '65. [redacted]

MARKOV, V.P.; TSAPKIN, V.V.

Compounds of uranyl with 1, 10-phenanthroline and 2, 2'-bipyridyl.
Zhur.neorg.khim. 6 no.9:2059-2061 S '61. (MIRA 14:9)

1. Institut obshchey i neorganicheskoy khimii im. N.Kurnakova Akademii nauk SSSR.
(Uranyl compounds) (Phenathroline) (Bipyridine)

L 25696-66 EWT(1)/EWT(m)/T/EWP(t) IJP(c) AT/JD/JG

ACC NR: AP6002705 SOURCE CODE: UR/0056/65/049/006/1689/1694

AUTHOR: ZHabotinskiy, M. YE.; Rudnitskiy, YU. P.; TSapkin, V. V.; Ellert, G. V.

ORG: Institute of Radio Engineering and Electronics, Academy of Sciences SSSR (Institut radiotekhniki i elektroniki Akademii nauk SSSR)

TITLE: Transfer of excitation from the crystal lattice to rare earth ions

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 6, 1965, 1689-1694

TOPIC TAGS: cesium compound, uranium compound, rare earth element, excitation spectrum, activated crystal, luminescence spectrum, absorption band, crystal lattice energy

ABSTRACT: The authors have experimentally confirmed the possibility of efficient transfer of excitation energy from the crystal lattice to activator ions, and present the results of a study of such a transfer from uranyl cesium tetrachloride lattice to a rare-earth ion. Polycrystalline uranyl cesium tetrachloride was used, activated by rare earths (other than Ce and Gd) with concentration 0.1--0.5 mol.% The luminescence spectra and excitation spectra were recorded and the lifetimes measured. The luminescence was excited both directly in the excitation bands of the ions themselves and through excitation of the lattice. The luminescence produced by Pr, Nd, Eu, Ho, Er, and Tm was quite strong, that of Sm weaker, and no luminescence of Tb and Dy was observed. Luminescence of Yb was observed only in the ir region on pumping in the ion absorption band. It is deduced from the excitation spectra that an efficient energy transfer exists between the lattice and the activator ions. Luminescence excited

Card 1/2

L 25696-66

ACC NR: AP6002705

through lattice pumping is much more intense than that induced directly in the ion absorption band. The energy transfer is accompanied by appreciable shortening of the lifetime of the excited state of the uranyl, indicating a nonradiative transfer mechanism. Orig. art. has: 6 figures.

SUB CODE: 20/ SUBM DATE: 14Jun65/ ORIG REF: 004/ OTH REF: 004

Card 2/2

GOLOVNYA, V.A., doktor khim. nauk; EILERT, G.V., kand. khim. nauk; SHUBOCHKIN, L.K., kand. khim. nauk; SHCHELOKOV, R.N., kand. khim. nauk; TSAPKINA, I.V., kand. khim. nauk; TRAGGETM, Ye.N., kand. khim. nauk; MARKOV, V.P., doktor khim. nau, [deceased]; AJ.TKHANOVA, Z.N.; DYATKINA, M.Ye., doktor khim. nauk; MIKHAYLOV, Yu.N.; TSAPKIN,V.V.,kand.khim.nauk; BOLOTOVA,G.T.,kand.khim.nauk; CHERNYAYEV,V.A.,doktor khim.nauk; KORCHEMNAYA,Ye.K., red.

[Complex compounds of uranium] Kompleksnye soedineniia urana. Moskva, Izd-vo "Nauka," 1964. 488 p. (MIRA 17:7)

1.Akademiya nauk SSSR. Institut obshchey i neorganicheskoy khimii. 2. Laboratoriya khimii kompleksnykh soyedineniy aktinidov Instituta obshchey i neorganicheskoy khimii AN SSSR (for all except Korchemnaya).

MARKOV, V.P.; TSAPKINA, I.V.

Determination of the molecular refraction of some urea compounds of uranyl. Zhur.neorg.khim. 7 no.5:1206-1207 My '62. (MIRA 15:7)

(Uranyl compounds--Optical properties) (Urea)

SOV/78-4-10-14/40

5(2)
AUTHORS: Markov, V. P., Tsapkina, I. V.

TITLE: Compounds of Uranyl Salts With Urea

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 10, pp 2255-2260 (USSR)

ABSTRACT: After a short survey of the publications available on this problem the authors refer to the urea complexes of uranyl salts produced in 1957 by P. S. Gentill and L. H. Tally (Ref 4) and in 1952 by V. A. Golovnya. In the experimental part the syntheses and analysis results of the following compounds are described: $UO_2SO_4 \cdot 2CO(NH_2)_2$; $UO_2SO_4 \cdot 3CO(NH_2)_2$; $UO_2SO_4 \cdot 4CO(NH_2)_2$; $UO_2Cl_2 \cdot 2CO(NH_2)_2 \cdot H_2O$; $UO_2Cl_2 \cdot 3CO(NH_2)_2 \cdot H_2O$; $UO_2(NO_3)_2 \cdot 2CO(NH_2)_2$; $UO_2(NO_3)_2 \cdot 4CO(NH_2)_2 \cdot H_2O$; $(NH_4)_2[UO_2(C_2O_4)_2 \cdot H_2OCO(NH_2)_2]$; $UO_2(NO_3)_2 \cdot 5CO(NH_2)_2 \cdot H_2O$ and $UO_2(NO_3)_2 \cdot 6CO(NH_2)_2$. Furthermore the infrared absorption frequencies (Table 2) and heating curves (Fig 3) are given for uranyl sulphate and uranyl sulphate ureas. It is found that the di-urea complex of uranyl sulphate is more stable than the higher urea complexes. The

Card 1/2

Compounds of Uranyl Salts With Urea

complex ammonium-uranyl sulphate reacts with urea to form $UO_2SO_4 \cdot 2CO(NH_2)_2$ or $UO_2SO_4 \cdot 3CO(NH_2)_2$. On reaction of di-aqua-uranyl-ammonium-dioxalate a water molecule is substituted to form the complex compound $(NH_4)_2[UO_2(C_2O_4) \cdot H_2O \cdot CO(NH_2)_2]$. There are 3 figures, 2 tables, and 10 references, 3 of which are Soviet.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences, USSR)

SUBMITTED: September 19, 1958

S/078/61/006/002/015/017
B017/B054

AUTHORS: Belova, V. I., Syrkin, Ya. K., Markov, V. P., Tsapkina, I. V.

TITLE: Magnetic Susceptibility of Uranyl Compounds

PERIODICAL: Zhurnal neorganicheskoy khimii, 1961, Vol. 6, No. 2, pp. 495 - 497

TEXT: As had been found by V. P. Markov and I. V. Tsapkina (Ref. 1), the uranyl compounds UO_2SO_4, $UO_2(NO_3)_2$, UO_2Cl_2, and $UO_2C_2O_4$ may add 1 - 6 molecules of water, urea, acetamide, etc. The authors studied the magnetic susceptibility of 26 such addition compounds. Results of these investigations are compiled in a table. It was found that in the compounds $(CN_3H_6)_2[UO_2(C_2H_4)_2CO(NH_2)_2]$ and $Cs_2[UO_2(C_2O_4)_2(H_2O)_2]$ the paramagnetic properties depended on temperature. In various compounds, the diamagnetic component is nonuniform, and variable with the number of addenda, the

Card 1/4

structure of addends, and the binding character. The addition compounds of uranium with urea, acetamide, water, etc. are of the donor-acceptor type. The addenda influence the electron orbits, and are characterized by the change in diamagnetic susceptibility and the higher frequency of the paramagnetism. Some of the compounds were synthesized by R. N. Shchelokov. There are 1 table and 4 references: 1 Soviet, 1 US, 1 British, and 1 Indian.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov, Academy of Sciences USSR)

SUBMITTED: September 14, 1960

S/078/61/006/002/016/017
B017/B054

Соединение	Магнитная восприимчивость $\cdot 10^6$			
	$\chi_г$	$\chi_{моль}$	χ исходного соединения	χ_{UO}
UO_2SO_4*	+0,016	5,6	5,6	46
$UO_2SO_4 \cdot 3H_2O$	—0,024	—10,1	28	68
$UO_2SO_4 2CO(NH_2)_2$	—0,090	—43,8	23	63
$UO_2SO_4 3CO(NH_2)_2$	—0,128	—69,9	31	71
$UO_2SO_4 4CO(NH_2)_2$	—0,172	—104,3	30	70
$UO_2SO_4 2CH_3CONH_2$	—0,083	—40,2	28	68
$UO_2SO_4 CH_3CONH_2 \cdot 2H_2O$	—0,086	—39,7	20	60
$UO_2(NO_3)_2 \cdot 6H_2O$	—0,103	—51,7	24	62
$UO_2(NO_3)_2 2CO(NH_2)_2$	—0,088	—44,2	23	61
$UO_2(NO_3)_2 4CO(NH_2)_2 \cdot H_2O$	—0,180	—117,4	30	68
$UO_2(NO_3)_2 5CO(NH_2)_2 \cdot H_2O$	—0,201	—143,2	37	75
$UO_2(NO_3)_2 2CH_3CONH_2$	—0,115	—58,9	9	47
$UO_2Cl_2 2CO(NH_2)_2 \cdot H_2O$	—0,134	—63,9	16	63
$UO_2Cl_2 3CO(NH_2)_2 \cdot H_2O$	—0,154	—83,0	20	67

Card 3/4

$UO_2C_2O_4CO(NH_2)_2$	−0,027	−11,3	22	60
$UO_2C_2O_4CH_2CONH_2$	−0,025	−10,4	24	62
$K_2[UO_2(C_2O_4)_2H_2OCO(NH_2)_2]$	−0,135	−81,3		70
$(C_{10}H_8N_2H)_2[(UO_2)_2C_2O_4(SO_4)_2(CO(NH_2)_2)_2]$	−0,188	−235,9		70
$C_{10}H_8N_2H[UO_2C_2O_4Cl]$	−0,131	−72,1		85
$C_{10}H_8N_2H_2[(UO_2)_2C_2O_4Cl_4(CO(NH_2)_2)_2]$	−0,147	−154,1		72
$C_{10}H_8N_2H_2[UO_2C_2O_4Cl\cdot H_2O]_2$	−0,087	−85,4		81
$(CN_3H_6)_2[UO_2(C_2O_4)_2CO(NH_2)_2]$ *	−0,166	−104		73
$(C_{10}H_8N_2H)_2[UO_2(SO_4)_2\cdot H_2OCO(NH_2)_2]$	−0,264	−225,6		92
$(NH_4)_2[UO_2(C_2O_4)_2(H_2O)_2]$ **	−0,119	−61,7		66
$Rb_2[UO_2(C_2O_4)_2(H_2O)_2]$ **	−0,110	−71,8		75
$Cs_2[UO_2(C_2O_4)_2(H_2O)_2]$ **	−0,147	−110,0		61

Legend to the table: 1: magnetic susceptibility, 2: mole, 3; initial compound

Card 4/4

S/078/61/006/003/010/022
B121/B208

AUTHORS: Dyatkina, M. Ye., Markov, V. P., Tsapkina, I. V., Mikhaylov, Yu. N.

TITLE: Electron structure of the group UO_2 in uranyl compounds

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 3, 1961, 575-580

TEXT: The stability of the uranyl group in various compounds depends on the remaining atoms or groups appearing as addenda in the coordination sphere of uranyl. The uranium atom is characterized by a large number of free electron orbits. There are donor-acceptor bonds between the ligands and uranium, which compete with the donor-acceptor bonds of the UO_2 group. This competition results in the formation of solid complexes of uranium with ligands of pronounced donor properties, such as ammonia, amines, thiourea, etc. The formation of secondary bonds between uranium and the ligands also depends largely on their ionic character. The nature of the bonds in the compounds UF and UO_2F is discussed. The existence of donor-acceptor bonds with secondary ligands prevents the appearance of additional donor-acceptor bonds of U with oxygen. By substituting H_2O or $CO(NH_2)_2$ for the secondary ligands

S/078/61/006/003/010/022
B121/B208

Electron structure ...

NO_3', C_2O_4'' or SO_4'', the number of donor-acceptor bonds is increased and the donor-acceptor bonds in the $U\overleftarrow{=}O$ group are weakened. The ν_{asUO_2} frequency thus decreases. This decrease occurs by strengthening the donor properties of the secondary ligands in uranium compounds. This result agrees with the observation made by V. M. Vdovenko, D. N. Suglobov, and V. A. Krasil'nikov (Ref. 12). The change of paramagnetic susceptibility by inclusion of secondary ligands is discussed. By exchanging H_2O for $CO(NH_2)$ in the sulfates, chlorides, and oxalates of uranyl, the paramagnetic susceptibility is slowly increased. The authors also discuss the change of the polarizability of the uranyl ion by inclusion of acceptor-donor ligands. The competition between the donor-acceptor bonds of the UO_2 group and secondary ligands is observed in the following groups: NpO_2, PuO_2, AmO_2, TiO, ZrO, VO, etc.

Mention is made of Ya. K. Syrkin, V. I. Belov, A. N. Nesmeyanov, and T. P. Tolstaya. There are 17 references: 7 Soviet-bloc and 10 non-Soviet-bloc.

SUBMITTED: September 21, 1960

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001756910019-2"

MARKOV, V.P.; TSAPKINA, I.V.

Some acyl-complex compounds of uranyl containing urea in their composition. Zhur.neorg.khim. 8 no.2:285-289 F '63. (MIRA 16:5)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova AN SSSR.

(Uranyl compounds) (Urea)

TSAPKO, A.I., inzh.

Hooks for climbing reinforced-concrete poles. Energetik 8 no.11: 27-28 N '60. (MIRA 13:12)
(Electric lines--Poles)

TSAPKO, A.S.

Cold Storage on Shipboard

"Isothermal" fleet in the Ob'-Irtysh basin. Ryb. khoz. 27, no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, AUGUST 1952. 1953. Unclassified.

TSARKO, L. S.

Fishery Products - Preservation

Ice-brine and permafrost salt storage vaults in Siberia, Rybn. Khoz. S., No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

1. TSAPKO, A.S.; DENISOV, P.A.

2. USSR (600)

4. Fish, Smoked

7. Continuous-action smoke generator, A.S. TSapko, P.A. Denisov, Rybn.khoz. 29 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

TSAPKO, Aleksandr Stepanovich; KOZHUKHOVA, D.S., red.; BOL'SHAKOVA, L.A., tekhn. red.

[Fish preservation by refrigeration]Konservirovanie ryby kholodom. Arkhangel'sk, Arkhangel'skoe knizhnoe izd-vo, 1959. 97 p. (MIRA 15:11)
(Fishery products—Preservation)
(Refrigeration and refrigerating machinery)

TSAPKO, A.S., otv.red.; GLIKMAN, S.A., doktor khim. nauk, prof., red.; GEMP, K.P., st. nauchn. sotr., red.; GRYUNER, V.S., doktor tekhn. nauk, red.; DANILOV, S.N., red.; YEVTUSHENKO, V.A., kand. khim. nauk, red.; ZINOVA, A.D., kand. biol. nauk, red.; KIZEVETTER, I.V., doktor tekhn. nauk, red.; KIREYEVA, M.S., kand. biol. nauk, red.; VULIKHMAN, M.A., red.; POTEKHIN, L.P., red.

[Transactions of the First All-Union Conference of Workers in the Algal Industry of the U.S.S.R.] Trudy Pervogo Vsesoiuznogo nauchno-tekhnicheskogo soveshchaniia po vodoroslevoi promyshlennosti SSSR. Arkhangel'sk, Arkhangel'skoe knizhnoe izd-vo. Vol.1. 1962. 214 p. (MIRA 17:12)

1. Vsesoyuznoye soveshchaniye rabotnikov vodoroslevoy promyshlennosti SSSR. 1st. 2. Chlen-korrespondent AN SSSR (for Danilov). 3. Vsesoyuznyy nauchnyy institut morskogo rybnogo khozyaystva i okeanografii (for Kireyeva). 4. Nachal'nik Upravleniya rybnoy promyshlennosti Arkhangel'skogo sovnarkhoza (for TSapko). 5. Saratovskiy gosudarstvennyy universiteta im. N.G.Chernyshevskogo (for Glikman).

TSAPKO, G.Ye.; SEREBRYANNAYA, A.I., khimik

Experiment in determing dust in the air of Kiev. Gig. i san. 24 no.2:74-75 F '59. (MIRA 12:3)

1. Iz Kiyevskoy sanitarno-epidemiologicheskoy stantsii. 2. Gosudarstvennyy sanitarnyy inspektor (for TSapko).
(AIR POLLUTION, determ.
dust determ. in air of Kiev (Rus))

17(SOV/177-58-5-13/30

AUTHOR: Tsapko, M.S., Colonel of the Medical Corps
Karakis, L.V., Lieutenant Colonel of the Medical Corps, and Dub, Ye.M.

TITLE: Some Results of a Parasitological Exploration (Nekotoryye itogi parazitologicheskoy razvedki)

PERIODICAL: Voyenno-meditsinskiy zhurnal, 1958, Nr 5, pp 60 - 62 (USSR)

ABSTRACT: The authors give the results of a 3-year parasitological reconnaissance for specifying the representatives of the Ixodidae family in military camps in various geographical zones such as woodlands, the forest-steppe and the steppe. Among the ticks in the woodlands, they identified predominantly Dermacentor marginatus, Ixodes ricinus and Dermacentor pictus; in the forst-steppe prevailed Ixodes ricinus, Rhipicephalus and Laelaps algericus, and in the steppe-Hyalomna scupense, Dermacentor marginatus and Rhipicephalus. The authors stress the importance of sy-

Card 1/2

Some Results of a Parasitological Exploration

stematic parasitological exploration in densely populated regions where people come into direct contact with cattle, in order to ascertain the presence of breeding grounds of parasites and to take timely prophylactic measures. There are 2 Soviet references.

ACC NR: AP7005662 (A, N) SOURCE CODE: UR/0413/67/000/002/0118/0119

INVENTOR: Tsapko, N. Z.; Moroz, D. A.; Smoliy, V. G.; Bogomolov, V. S.; Nesterov, P. G.; Sergeyev, V. P.

ORG: None

TITLE: An automatic printer. Class 42, No. 190671 [announced by the Scientific Research Institute of Control Computers (Nauchno-issledovatel'skiy institut upravlyayushchikh vychilitel'nykh mashin)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 118-119

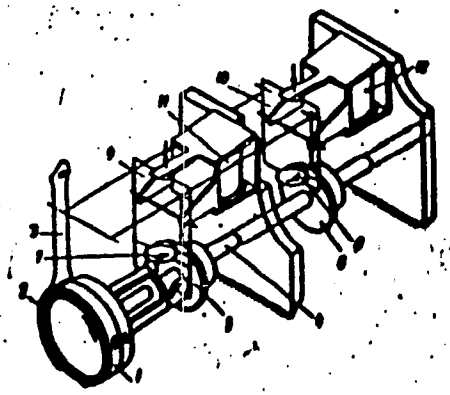
TOPIC TAGS: printing machinery, automatic machine

ABSTRACT: This Author's Certificate introduces an automatic printer which contains a register wheel and a colored ribbon. To increase printout capacity and provide a larger number of symbols, a two-register (double-row) spring loaded wheel is used with a two-color printing ribbon which has a guide lever. Reciprocating motion of the wheel and the ribbon guide lever along the shaft of the wheel is produced by interaction between cams set fast on the shaft and rollers located in the lower section of frames which are fixed in two positions by electromagnets controlled by pulse transmitters for switching the register and ribbon color.

UDC: 681.61:681.142

Card 1/2

ACC NR: AP7005662



1—register wheel; 2—ribbon; 3—lever; 4—shaft; 5 and 6—cams; 7 and 8—rollers; 9 and 10—frames; 11 and 12—electromagnets

SUB CODE: 09, 14/ SUBM DATE: 14May65

Card 2/2

TSAPKO, V. G.; PAUSTOVSKAYA, V. V.; KRASNOSHCHEKOV, N. A. (Kiyev)

Sanitary hygienic characteristics of work conditions in streptomycin production. Gig. truda i prof. zab. no.1:52-53 '62. (MIRA 15:2)

1. Kiyevskiy meditsinskiy institut.

(INDUSTRIAL HYGIENE) (STREPTOMYCIN—TOXICOLOGY)

TSAPKO, V.G., mladshiy nauchnyy sotrudnik

Safety measures in using chlorophos. Zashch. rast. ot vred. i bol. 8 no.5:35 My '63. (MIRA 16:9)

1. Institut gigiyeny truda i professional'nykh zabolevaniy, Kiyev.
(Chlorophos—Safety measures)

PAUSTOVSKAYA, V.V., kand. med. nauk; TSAPKO, V.G.; KRASNOSHCHEKOV, N.A.

Effect of streptomycin on the organism. Vrach. delo no.2: 123-127 F'64 (MIRA 17:4)

1. Kafedra gigiyeny truda (zav. - chlen-korrespondent AMN SSSR prof. G.Kh. Shakhbazyan) Kiyevskogo meditsinskogo instituta.

SHPITS, Zh.D.; SANIN, V.A.; KISH, S.S.; TSAPKO, V.G.

Granulated chlorophos for corn fields. Zashch. rast. ot vred. i bol. 9 no.9:19 '64. (MIRA 17:11)

1. Ukrainskiy nauchno-issledovatel'skiy institut zashchity rasteniy i Gosudarstvennyy nauchno-issledovatel'skiy institut Grazhdanskogo vozdushnogo flota.

L 29011-66 EWT(1) RO
ACC NR: AP6018870 SOURCE CODE: UR/0240/65/000/004/0032/0036

AUTHOR: Tsapko, V. G.

ORG: Kiev Scientific Research Institute of Labor Hygiene and Occupational Diseases (Kiyevskiy nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy)

TITLE: Materials for determining hygienic standards for chlorophos in the air of working areas

SOURCE: Gigiyena i sanitariya, no. 4, 1965, 32-36

TOPIC TAGS: mouse, rat, rabbit, cat, toxicology, pharmacology

ABSTRACT: Experiments were conducted in which chlorophos (dipterex, Bauer L 13/59, dilox, and trichlorphon are corresponding non-Soviet names) was administered by various routes to white mice and rats, rabbits, and cats. The results indicated that the preparation could enter the organism through the gastrointestinal tract, through the respiratory organs, and through intact skin. LD_{50} of chlorophos for white mice, rats and cats was 1,015, 945, and 97 mg per kg, respectively. No mortality was observed from administration of the preparation to the skin of the animals. It is concluded that the toxicity of chlorophos is less than that of mercaptophos (Demeton), thiophos (Parathion), methyl mercaptophos, M-81, etc. The clinical aspects of chlorophos poisoning are described. The cumulative

Card 1/2

UDC: 614.72:615.778.3-099:613.6

L 29011-66
ACC NR: AP6018870

properties of chlorophos are less pronounced than those of mercaptophos, thiophos, and other similar preparations. A single exposure of rats to fumes in a concentration of 0.01 mg per l resulted in a 56% reduction of cholinesterase activity; a concentration of 0.002 mg per l resulted in a 20% reduction in some animals, with full recovery after two days. At the present time chlorophos is recommended to replace a number of highly toxic and cumulative preparations, above all DDT. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: 23Jan64 / ORIG REF: 003 / OTH REF: 001

Card 2/2 BLG

TSAPKO, V., mladshiy nauchnyy sotrudnik

Be careful in working with chlorophos. Zashch. rast. ot vred. i bol. 10 no.7:33-34 '65. (MIRA 18:10)

1. Institut gigiyeny truda i professional'nykh zabolevaniy, Kiyev.

TSAPKO, V. V., Cand Med Sci, "Hygienic characteristics of water of the Buchak water-bearing horizon within the boundaries of the Dnepr-Donets depression, its utilization and sanitary protection." Kiev, 1960. (Kiev Order of Labor Red Banner Med Inst im Acad A. A. Bogomolets). (KL, 2-61, 220).

TSAPKO, V.V. (Kiyev)

In the medical societies. Vrach.delo no.2:215-216 F '60. (MIRA 13:6)

(UKRAINE--THERAPEUTIC SOCIETIES)
(UKRAINE--TUBERCULOSIS)
(UKRAINE--PUBLIC HEALTH)
(UKRAINE--MEDICAL SOCIETIES)

TSAPKO, V.V. (Kiyev)

Hygienic rating of the water from the Buchak water-bearing horizon. Vrach.delo no.12:1323-1325 D '57. (MIRA 11:2)

1. Ukrainskiy institut kommunal'noy gigiyeny
(DNIEPER LOWLAND--WATER, UNDERGROUND)
(DONETS BASIN--WATER, UNDERGROUND)

TSAPKO, V.V., aspirant

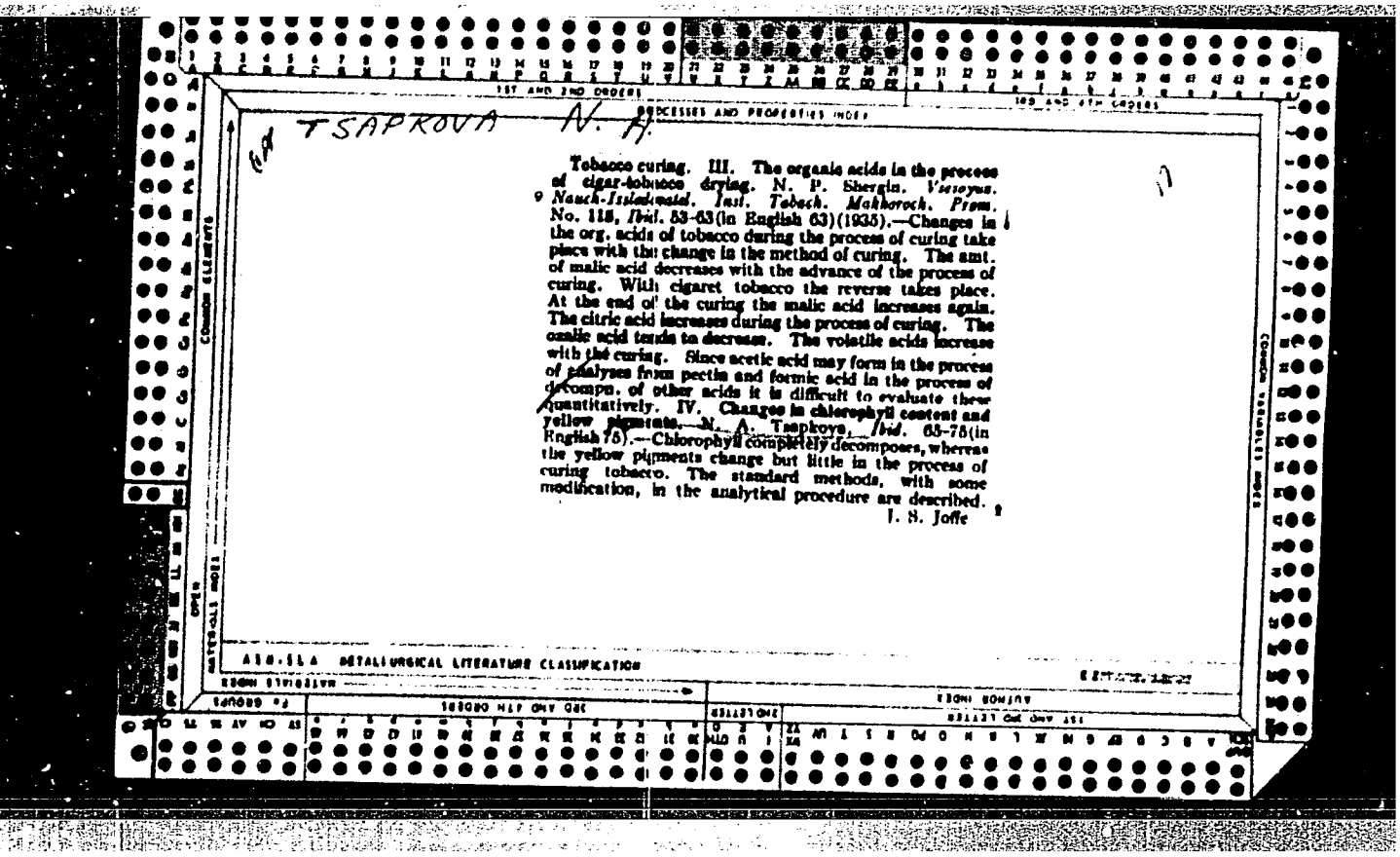
Effect of surface soil pollution on the quality of water in artesian water-horizons. Gig. i san. 23 no.5:66-68 My'58 (MIRA 11:6)

1. Iz Ukrainskogo instituta kommunl'noy gigiyeny.
(WATER POLLUTION
eff. of surface soil pollution on water of artesian water-bearing horizons (Rus))
(SOIL, microbiol.
same)

TSAPKOV, N.T.

Dressing glauconite ore. Gor. zhur. no.11:68-69 N '64.
(MIR 18:2)

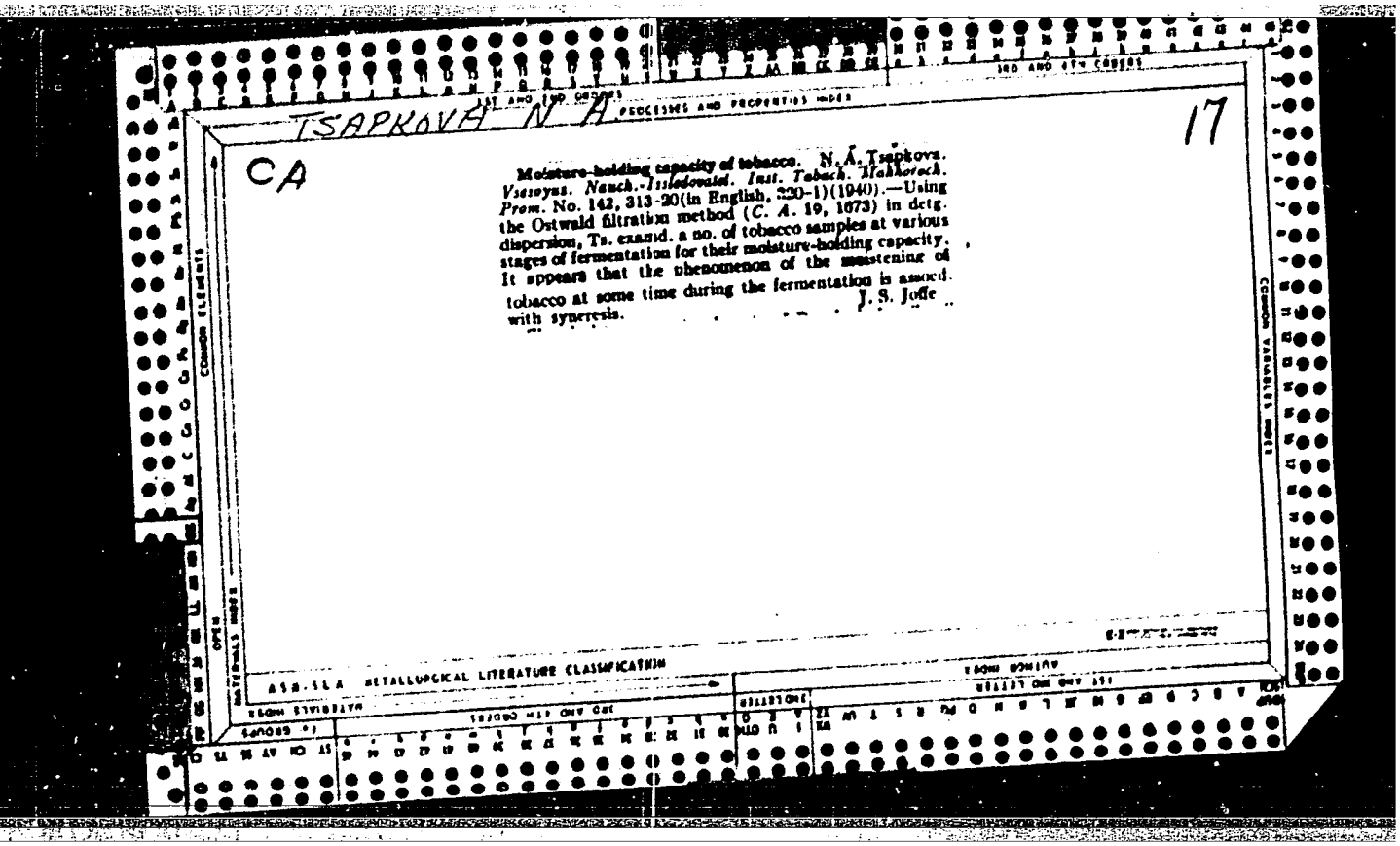
1. Sredneaziatskiy nauchno-issledovatel'skiy institut geologii i mineral'nogo syr'ya, Tashkent.



TSAPKOVA N. A.

Tobacco curing. III. The organic acids in the process of cigar-tobacco drying. N. P. Shergin. *Vsesoyus. Nauch.-Issledovatel. Inst. Tabach. Makhorochn. Prom.* No. 118, *Ibid.* 53-63(in English 63)(1935).—Changes in the org. acids of tobacco during the process of curing take place with the change in the method of curing. The amt. of malic acid decreases with the advance of the process of curing. With cigaret tobacco the reverse takes place. At the end of the curing the malic acid increases again. The citric acid increases during the process of curing. The oxalic acid tends to decrease. The volatile acids increase with the curing. Since acetic acid may form in the process of analyses from pectin and formic acid in the process of decompn. of other acids it is difficult to evaluate these quantitatively. IV. Changes in chlorophyll content and yellow pigments. N. A. Tsapkova. *Ibid.* 65-78(in English 75).—Chlorophyll completely decomposes, whereas the yellow pigments change but little in the process of curing tobacco. The standard methods, with some modification, in the analytical procedure are described.

I. S. Joffe



TSAPKOVA N A

17

CA

Moisture-holding capacity of tobacco. N. A. Tsapkova. *Vsesoyuz. Nauch.-Issledovatel. Inst. Tabach. Makhorochn. Prom.* No. 142, 313-20(in English, 320-1)(1940).—Using the Ostwald filtration method (*C. A.* 19, 1673) in detg. dispersion, Ts. examd. a no. of tobacco samples at various stages of fermentation for their moisture-holding capacity. It appears that the phenomenon of the moistening of tobacco at some time during the fermentation is assocd. with syneresis. J. S. Joffe

Tsapkova, N. A.

USSR/Biology - Plant physiology

Card 1/1 Pub. 22 - 43/48

Authors : Mashkovtsev, M. F.; Tsapkova, N. A.; and Moiseeva, M. E.

Title : Destruction of nicotine by the tobacco plant cells during autolysis and hunger metabolism

Periodical : Dok. AN SSSR 98/3, 491-494, Sep 21, 1954

Abstract : The role of nicotine in the life of a tobacco plant, is explained. The destruction of the nicotine by the tobacco plant cells during autolysis and hunger metabolism and its effect on the growth of tobacco leaf, are discussed. Eight references: 7-USSR and 1-German (1926-1949). Tables.

Institution : The A. I. Mikoyan All-Union Scientific Research Tobacco Institute, Krasnodan

Presented by: Academician A. L. Kursanov, June 21, 1954

KOROTUN, M.V.; PAVLINOVA, A.V.; PROTSENKO, A.Ye.; TSAPLENKOVA, P.S.; BODROVA, N.I.

Photoelectrocolorimetric determination of large amounts of potassium in solution. Izv.vys.ucheb.zav.; khim.i khim.tekh. 4 no.6:1037-1039 '61. (MIRA 15:3)

1. Chernovitskiy gosudarstvennyy universitet i Kalushskiy kaliynyy kombinat.

(Potassium--Analysis)

TSAPLEV, N., inzh.

Efficiency in structural designs for 16-story completely prefabricated buildings. Zhil. stroi. no.1:16-17 '65.
(MIRA 18:3)

KAZAKOV, I., inzh., TSAPLEV, N., inzh.

Panel floors. Zhil. stroi. no.12:20-22 '60. (MIRA 13:11)
(Floors, Concrete)

MOROZOV, N.V., kand. tekhn. nauk; MKRTUMYAN, A.K., kand. tekhn. nauk; ANTIPOV, T.P., arkh.; KOCHESHKOV, V.G., inzh.; LISAGOR, I.A., inzh.; TSAPLEV, N.N., inzh.; IVASHKOVA, V.K., kand. tekhn. nauk; SHIKUNOV, I.Ya., inzh.; FILIN, Yu.D., inzh.; MOSTAKOV, V.I.; BURLACHENKO, P.Ye., kand. khim. nauk[deceased]; PANKRATOV, V.F., inzh.; RUBANENKO, B.R., glav. red.; ROZANOV, N.P., zam. glav. red.; ONUFRIYEV, I.A., red.; YUDIN, Ye.Ya., red.; NASONOV, V.N., red.; ISIDOROV, V.V., red.; MAKARICHEV, V.V., red.; POLUBNEVA, V.I., red.

[Ways of improving design details for the seams of exterior wall slabs] Puti uluchsheniia konstruktivnykh reshenii stykov panelei naruzhnykh sten. Moskva, TSentr. biuro tekhn. informatsii i nauchno-issl. in-ta organizatsii, mekhanizatsii i tekhn. pomoshchi stroit., 1962. 78 p. (MIRA 16:8)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektno-eksperimental'nyy institut industrial'nykh zhilykh i massovykh kul'turno-bytovykh zdaniy (for TSaplev). 2. Nauchno-issledovatel'skiy institut betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR, Perbvo (for Mostakov). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov Akademii stroitel'stva i arkhitektury SSSR (for Pankratov).

(Table)

1. LEVIN, D.; TSAPLIN, A.

2. USSR (600)

4. Meat Industry--Accounting

7. Cost calculation of sausage products. Mias. ind. SSSR 23 no.5 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

OVCHINNIKOV, I.K., prof.; KADKIN, V.A., inzh.; TSAPLIN, A.A., inzh
[deceased]

Investigating the wetting by mercury of platinum and its alloys.
Izv.vys.ucheb.zav.; gor.zhur. no.1:144-148 '60.
(MIRA 13:6)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva.
Rekomendovana kafedroy fiziki.
(Platinum) (Surface chemistry)

SOV-107-58-9-25/39

AUTHOR: Tsaplin, D. (Lyubertsy, Moskva Oblast')

TITLE: Preparing a Frameless Coil (Izgotovleniye bezkarkasnoy ramki)

PERIODICAL: Radio, 1958, Nr 9, p 39 (USSR)

ABSTRACT: The author describes a method of winding a coil for a permanent-magnet moving-coil instrument. A block of wood with cross-section shaped to the size of the desired coil is fixed to a drill by a sawn-off nail driven into one end. The block is rotated to wind on the wire, one layer at a time, with a coating of glue inbetween layers. When dry the completed coil can be slipped off and is then ready for use. There is 1 diagram.

1. Armature coils--Construction

Card 1/1

6 (5)

SOV/107-59-3-49/52

AUTHOR: Tsaplin, L.

TITLE: A Friction Clutch for a Three-Motor Tape Winding Mechanism (Friktsionnoye stsepleniye v trekhmotornykh lentoprotyazhnykh mekhanizmakh)

PERIODICAL: Radio, 1959, Nr 3, p 53 (USSR)

ABSTRACT: Figure 1 shows a drawing of a friction clutch the purpose of which is to prevent the tearing or stretching of the tape when switching on the tape recorder. The clutch is installed on the shaft of the right tape recorder motor and the degree of friction is adjustable by a small screw. There is 1 drawing.

Card 1/1

RABINOVICH, R.I. Prinimali uchastiye: ALEGLAN, L.K., kand. sel'khoz. nauk; BARABANOVA, N.N.; BOSENKO, K.S.; VINNIK, V.V.; GRIGORCHUK, Ye.V.; GUMEROV, A.Kh.; DOBROCHASOV, D.F.; ZAMURAYEV, I.V.; ZAYTSEVA, A.G., kand. sel'khoz. nauk; KOL'TSOV, N.A.; LEVITIN, Kh.Z., kand. biol. nauk; LISITSKIY, B.Ya.; MATYASH, G.P.; MENTOV, A.V.; RABINOVICH,R.I.; SAL'NIKOV, V.V.; SVECHNIKOV, I.V.; SIMONOV, P.K.; SMIRNOV, V.V.; SMIRNOV, L.P.; SMIRNOVA, V.I.; STEPANOVA, V.I.; TARASOV, A.A.; FILATOVICH, V.V., kand. sel'khoz. nauk; FEDOROV, N.G., kand. tekhn. nauk; TSAPLIN, M.F.; KHROMOV, L.V.; DAVYDOVA, I., red.; PAL'MINA, N., tekhn. red.

[Sverdlovsk in Agricultural Exhibition of 1959] Sverdlovskaia sel'khoziaistvennaia vystavka. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1960. 131 p. (MIRA 14:10)

1. Sverdlovsk. Sverdlovskaya oblastnaya sel'skokhozyaystvennaya vystavka, 1959.
(Sverdlovsk—Agricultural exhibitions)

TSAPLIN, M.I., kand.tekhn.nauk

Converter of a continuous intermittent rotating motion. Vest. mashinostr. 42 no.8:22-24 Ag '62. (MIRA 15:8)
(Converters)

TSAPLIN, M.I. (Moskva)

Concerning I.T. Shvets, and E.P. Dyban's article "Development and study of air cooling systems of gas turbine units." Izv. AN SSSR. Energ. i transp. no.2:147-148 Mr-Ap '65.
(MIRA 18:6)

AUTHOR: [illegible]

TITLE: Heat transfer [illegible]

SOURCE: Teploenergetika, no. 2, 1965, 40-44

TOPIC TAGS: heat transfer, gas turbine, boundary value problem, water cooling

ABSTRACT: An analytical method is presented for obtaining the temperature distri- [illegible]

conductivity of the bolt, and

$$\theta_z = t_z - t_{cp}, \quad \theta_s = t_s - t_{cp}, \quad \Delta\theta = \theta_z - \theta_s.$$

Card 1/4

L 27098-65

ACCESSION NR: AP5004059

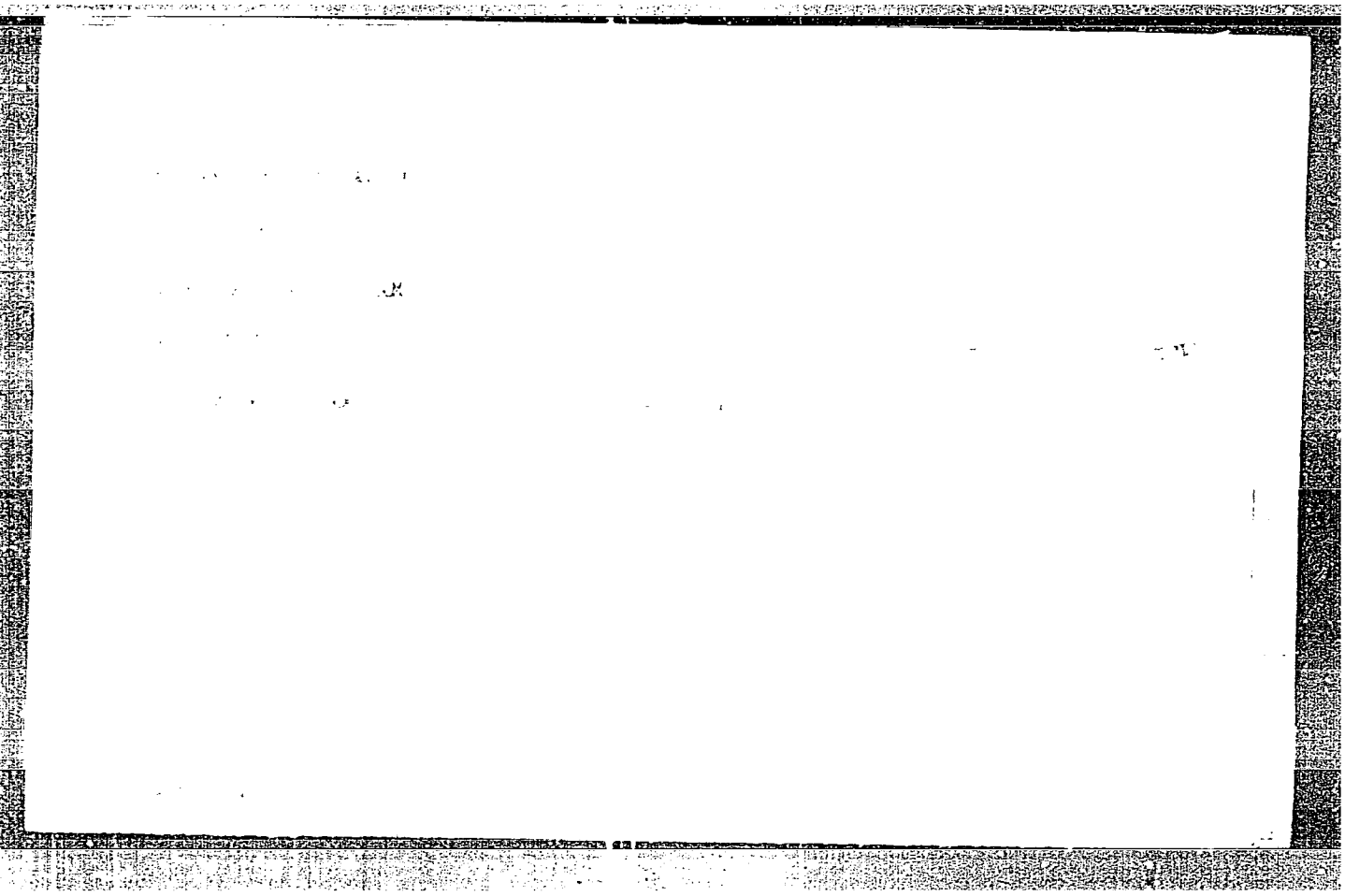
The solutions for ϑ_B and ϑ_Z are:

$$\vartheta_B = \frac{p^2 - k_1 r_1^2}{r_1^2(k_1 - k_2)} C_1 e^{r_1 x} + \frac{p^2 - k_2 r_2^2}{r_2^2(k_2 - k_1)} C_2 e^{r_2 x} +$$

$$+ \frac{p^2 - k_3 r_3^2}{r_3^2(k_3 - k_1)} C_3 e^{r_3 x} + \frac{p^2 - k_4 r_4^2}{r_4^2(k_4 - k_1)} C_4 e^{r_4 x} + C_5 x + C_6$$

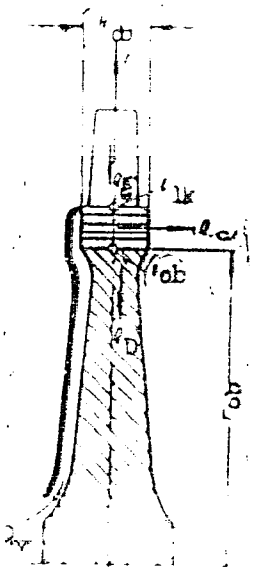
$$\vartheta_Z = \frac{p^2 - k_1 r_1^2}{r_1^2(k_1 - k_2)} C_1 e^{r_1 x} + \frac{p^2 - k_2 r_2^2}{r_2^2(k_2 - k_1)} C_2 e^{r_2 x} +$$

$$+ \frac{p^2 - k_3 r_3^2}{r_3^2(k_3 - k_1)} C_3 e^{r_3 x} + \frac{p^2 - k_4 r_4^2}{r_4^2(k_4 - k_1)} C_4 e^{r_4 x} + C_5$$



ACCESSION NR: AP5001059

ENCLOSURE: 01



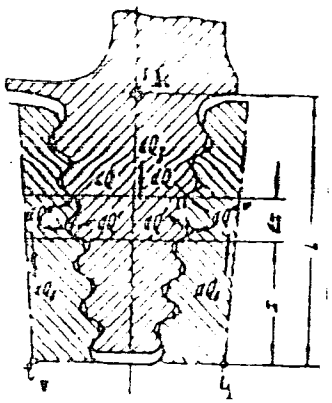


Fig. 1. Motor part for [illegible] the calculation was made

Card 4/4

TSAPLIN, M.I. (Moskva)

Converters of a steady rotating motion into an intermittent one. Mashinovedenie no.6:35-41 '65.
(MIRA 18:11)

TSAPLIN, Nikolay Dmitriyevich, starshiy inzh.

Mechanical causes of switching faults; grinding of the collectors of electrical machines with abrasive bars. Izv. vys. ucheb. zav.; elektromekh. 5 no.6:705-707 '62. (MIRA 15:10)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta elektromekhaniki.

(Electric machinery)
(Commutation(Electricity))

TSAPLIN, Sergei Afanas'evich.

mitei. Theory of computing elastic cables. Moskva. Mosoblpoligraf. 1957.
65 p.

MiU

1. Cables. 2. Elasticity.

[illegible]

[illegible] Dorizat, [illegible]

New [illegible] of solving problems of mechanics.

[illegible]

TO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1963.

TSAPLIN, SERGEY AFANAS'YEVICH

Technology

Suspension bridges, Moskva, Dorizdat, 1949.

Monthly List of Russian Accessions, Library of Congress, March 1952, UNCLASSIFIED.

TSAPLIN, S.A.; PETRUN'KIN, L.P., redaktor; KOVALIKHINA, N.F.; tekhnicheskiy redaktor

[Vibrator impact mechanisms for the construction of roads and bridges] Vibroudarnye mekhanizmy dlia dorozhno-mostovogo stroitel'stva. Moskva, Avtotransizdat, 1953. 149 p. (MLRA 7:8)
(Road machinery)

TSAPLIN, S.A., kandidat tekhnicheskikh nauk.

Vibration impact method of sinking pipes, piles and sheet piling. (MLRA 10:1)
Stroi. i dor.mashinostr. 1 no.2:22-25 F '56.
(Piling (Civil engineering))

BARKAN, D.D.; TIKUNOV, P.R.; SHEKHTER, O.Ya.; PREOBRAZHENSKAYA, N.A.; SAVINOV, O.A.; LUSKIN, A.Ya.; GREBENNIK, A.A.; MERZLYAK, TS.N.; ALEKSANDROV, M.A.; TSAPLIN, S.A.; PAVLOVA, A.B.; DITRIKH, Yu.V.; KHAVIN, B.N., red.izd-va; TEMKINA, Ye.L., tekhn.red.

[Instructions for driving and extracting steel pile planks using SN 59-59 vibrators] Instruktsiia po pogruzheniiu i izvlecheniiu stal'nogo shpunta vibropogruzhateliami SN 59-59. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1959. 46 p. (MIRA 13:3)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. Nauchno-issledovatel'skiy institut osnovaniy i podzemnykh sooruzheniy Akademii stroitel'stva i arkhitektury SSSR (for Barkan, Tikunov, Shekhter, Preobrazhenskaya). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhnicheskikh i sanitarno-tekhnicheskikh rabot (VNIIGS) (for Savinov, Luskin). 4. Fundamentproyekt (for Grebennik, Merzlyak). 5. Vsesoyuznyy nauchno-issledovatel'skiy institut stroitel'nogo i dorozhnogo mashinostroyeniya (VNIIStroydormash) (for TSaplin). 6. Gidroproyekt (for Pavlova). 7. Gidrospetsfundamentstroy (for Ditrikh). (Vibrators) (Piling (Civil engineering))

VYSHKIND, F., arkhitektor; TSAPLIN, V., inzh.

Landscaping state farm settlements on the Golodnaya Steppe.
Zhil.stroi. no.3:28-30 '62. (MIRA 15:9)
(Golodnaya Steppe--State farms)
(Golodnaya Steppe--Landscape architecture)

PODDUBNYY, I.; YANIKOV, I.; FABRIKOV, G., zhivotnovod; TARASYUK, A.; TSAPLIN, V.; BAKLITSKAYA, Ye., zven'yevaya; GRIDINA, A., doyarka; KRAVTSOVA, Z., telyatnitsa; KOMYAGINA, R., svinarka; SAVEL'YEV, I., chaban; SLADKOMEDOVA, N., ptichnitsa; KUD, M., mekhanizator; GOGIN, S., mekhanizator.

Our collective farm in seven years. Nauka i pered.op.v sel'khoz. 9 no.1:5-9 Ja '59. (MIRA 13:3)

1. Kolkhoz "Ukraina," Kirovskogo rayona Krymskoy oblasti. 2. Predsedatel' kolkhoza "Ukraina" Kirovskogo rayona Krymskoy oblasti (for Poddubnyy). 3. Glavnyy agronom kolkhoza "Ukraina" Kirovskogo rayona Krymskoy oblasti (for Yanikov). 4. Glavnyy mekhanik kolkhoza "Ukraina" Kirovskogo rayona Krymskoy oblasti (for Tarasyuk). 5. Sekretar' partorganizatsii kolkhoza "Ukraina" Kirovskogo rayona Krymskoy oblasti (for TSaplin).
(Kirovskoye District--Agriculture)

TSAPLIN, V.A.

New devices for determining the hardness of metals. Priborostroenie no.8:25-27 Ag '62. (MIRA 15:9)
(Hardness--Testing)

TSAPLIN, V.A.; BATSIYEVSKIY, A.F.; TEPLOV, V.S., inzh., retsenzent; STROGANOV, L.P., inzh., red.

[Equipment for the measurement of metal hardness] Pribory dlia izmereniia tverdosti metallov. Moskva, Izd-vo "Mashinostroenie," 1964. 90 p. (MIRA 17:6)

TSAPLIN, V.A.

Improving the process of pepper stuffing. Kons. i ov. prom. 16 no.6:15-16 Je '61. (MIRA 14:8)

1. Odesskiy konservnyy kombinat.
(Odessa--Canning industry)
(Pepper--Preservation)

TSAPLIN, V.A.; ANOSOV, S.A.

Testing the possible use of dairy plate heat exchange systems on grape juice production lines. Trudy MNIIPP 5:54-65 '64.
(MIRA 19:1)

BRODSKIY, A.Ya., kand. tekhn. nauk; YEVGEN'YEV, I.Ye., kand. tekhn. nauk;
FRIDMAN, A.M., inzh.; TSAPLIN, V.P., inzh.

Device for controlling strength of joints in welded reinforcements.
Nov. tekh. i perod. op. v stroi. 20 no.4:11-12 Ap '58. (MIRA 11:3)
(Reinforced concrete)

TSAPLIN, V.P.

Mechanization of fryers. Kons. i ov. prom. 14 no.11:14-16 N '59. (MIRA 13:2)

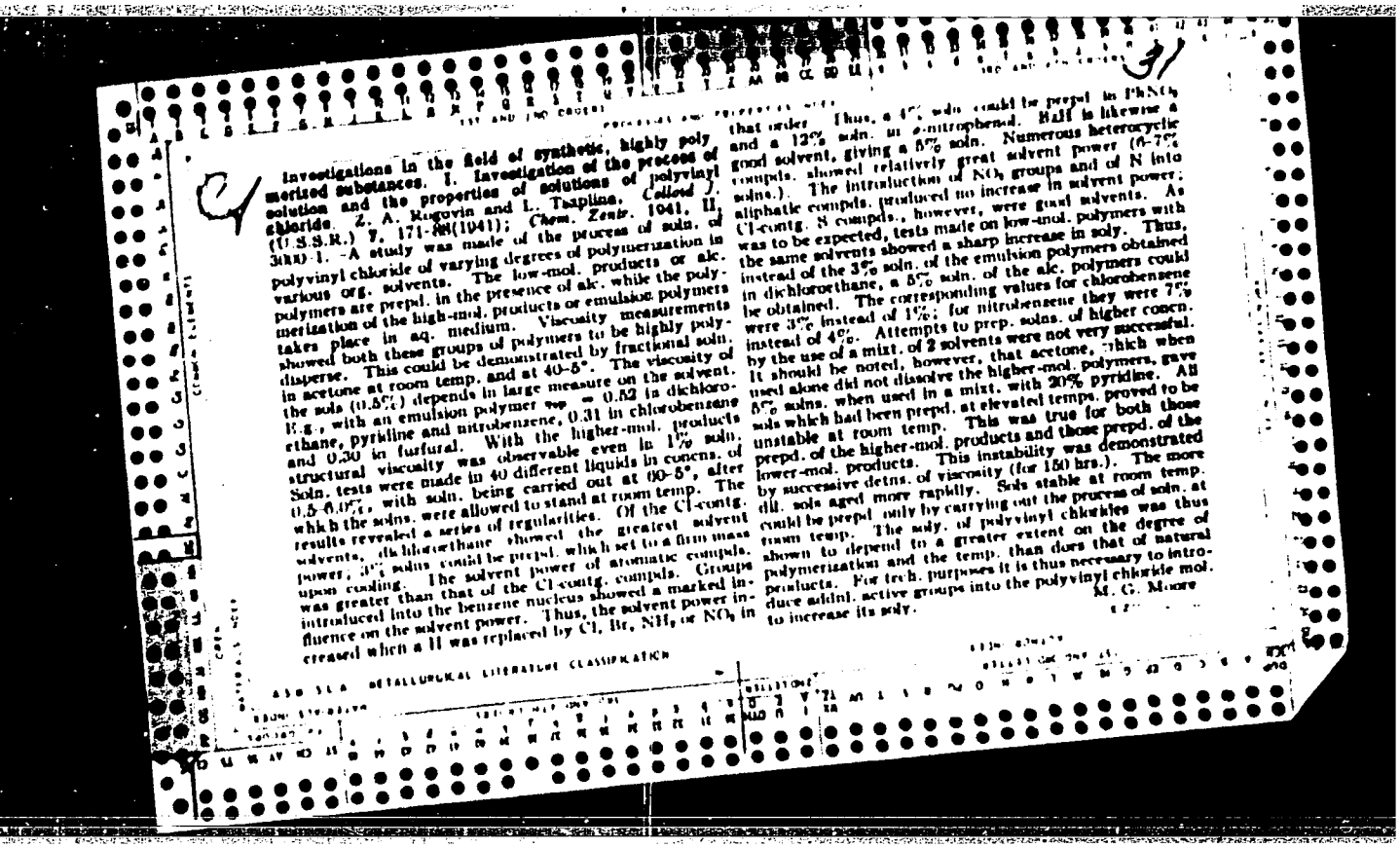
1.Odesskiy konservnyy kombinat.
(Canning and preserving--Equipment and supplies)

YEVREINOVA, T.N.; TSAPLINA, I.A.; AGRE, N.S.; DAVYDOVA, I.M.

Effect of temperature on nucleic acids of the thermophilic and mesophilic variants of Micromonospora vulgaris. Mikrobiologiia 34 no.3:411-417 My-Je '65.

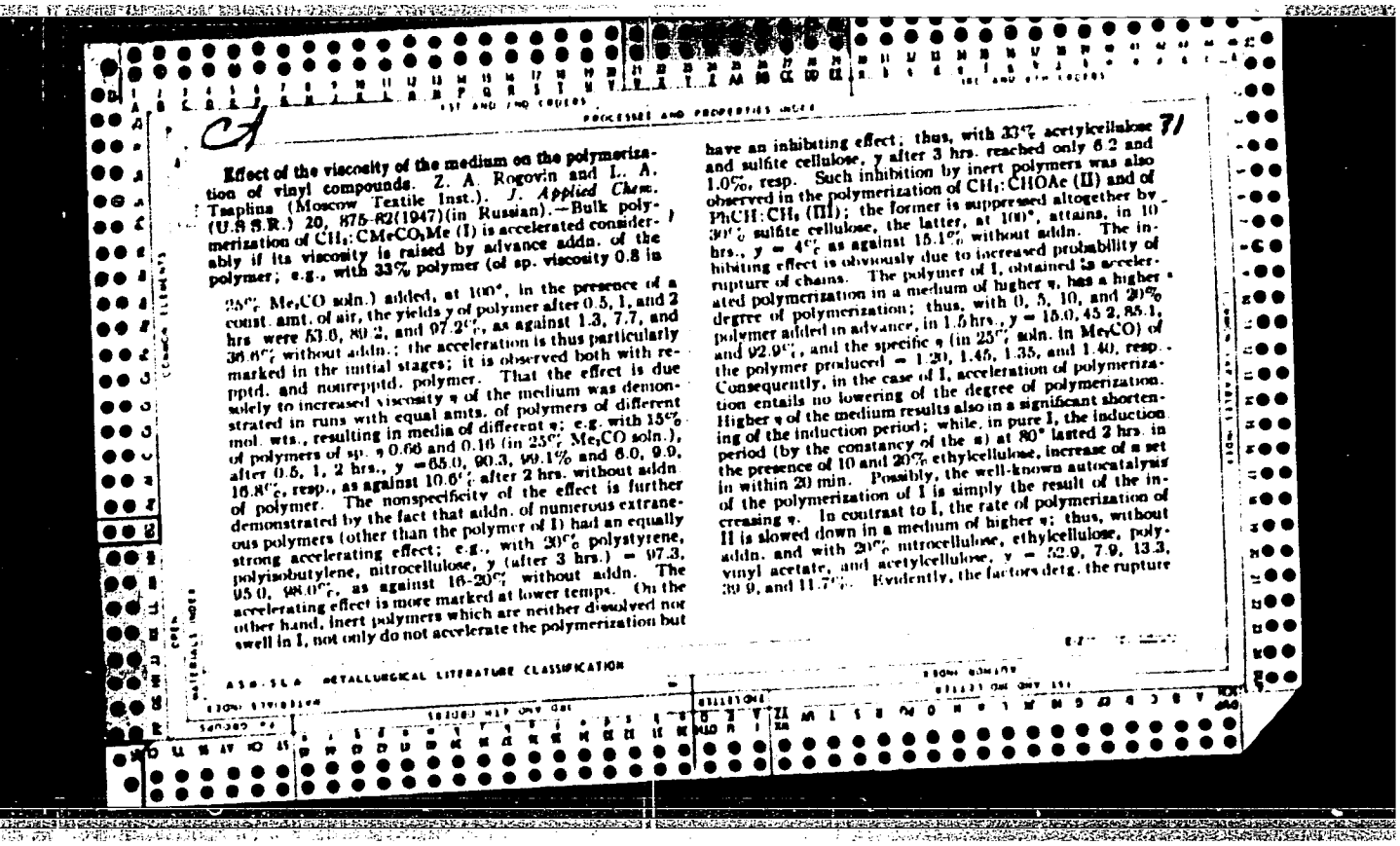
(MIRA 18:11)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova.



Investigations in the field of synthetic, highly poly merized substances. I. Investigation of the process of solution and the properties of solutions of polyvinyl chloride. Z. A. Rogovin and L. Tsaplina. *Collod. Z.* (U.S.S.R.) 7, 171-88(1941); *Chem. Zentr.* 1941, II, 3480-1. -A study was made of the process of soln. of polyvinyl chloride of varying degrees of polymerization in various org. solvents. The low-mol. products or alc. polymers are prepd. in the presence of alc. while the polymerization of the high-mol. products or emulsion polymers takes place in aq. medium. Viscosity measurements showed both these groups of polymers to be highly polydisperse. This could be demonstrated by fractional soln. in acetone at room temp. and at 40-5°. The viscosity of the sols (0.5%) depends in large measure on the solvent. E.g., with an emulsion polymer $\eta_{sp} = 0.52$ in dichloroethane, pyridine and nitrobenzene, 0.31 in chlorobenzene and 0.30 in furfural. With the higher-mol. products structural viscosity was observable even in 1% soln. Soln. tests were made in 40 different liquids in concns. of 0.5-6.0%, with soln. being carried out at 60-5°, after which the solns. were allowed to stand at room temp. The results revealed a series of regularities. Of the Cl-contg. solvents, dichloroethane showed the greatest solvent power, 3% solns could be prepd. which set to a firm mass upon cooling. The solvent power of aromatic compds. was greater than that of the Cl-contg. compds. Groups introduced into the benzene nucleus showed a marked influence on the solvent power. Thus, the solvent power increased when a H was replaced by Cl, Br, NH_2, or NO_2 in that order. Thus, a 4% soln. could be prepd. in $PhNO_2$ and a 12% soln. in p-nitrophenol. Ph$_2$O is likewise a good solvent, giving a 5% soln. Numerous heterocyclic compds. showed relatively great solvent power (6-7% solns.). The introduction of NO_2 groups and of N into aliphatic compds. produced no increase in solvent power; Cl-contg. N compds., however, were good solvents. As was to be expected, tests made on low-mol. polymers with the same solvents showed a sharp increase in soly. Thus, instead of the 3% soln. of the emulsion polymers obtained in dichloroethane, a 5% soln. of the alc. polymers could be obtained. The corresponding values for chlorobenzene were 3% instead of 1%; for nitrobenzene they were 7% instead of 4%. Attempts to prep. solns. of higher concn. by the use of a mixt. of 2 solvents were not very successful. It should be noted, however, that acetone, which when used alone did not dissolve the higher-mol. polymers, gave 5% solns. when used in a mixt. with 20% pyridine. All sols which had been prepd. at elevated temps. proved to be unstable at room temp. This was true for both those prepd. of the higher-mol. products and those prepd. of the lower-mol. products. This instability was demonstrated by successive detns. of viscosity (for 150 hrs.). The more dil. sols aged more rapidly. Sols stable at room temp. could be prepd. only by carrying out the process of soln. at room temp. The soly. of polyvinyl chloride was thus shown to depend to a greater extent on the degree of polymerization and the temp. than does that of natural products. For tech. purposes it is thus necessary to introduce additl. active groups into the polyvinyl chloride mol. to increase its soly.

M. G. Moore

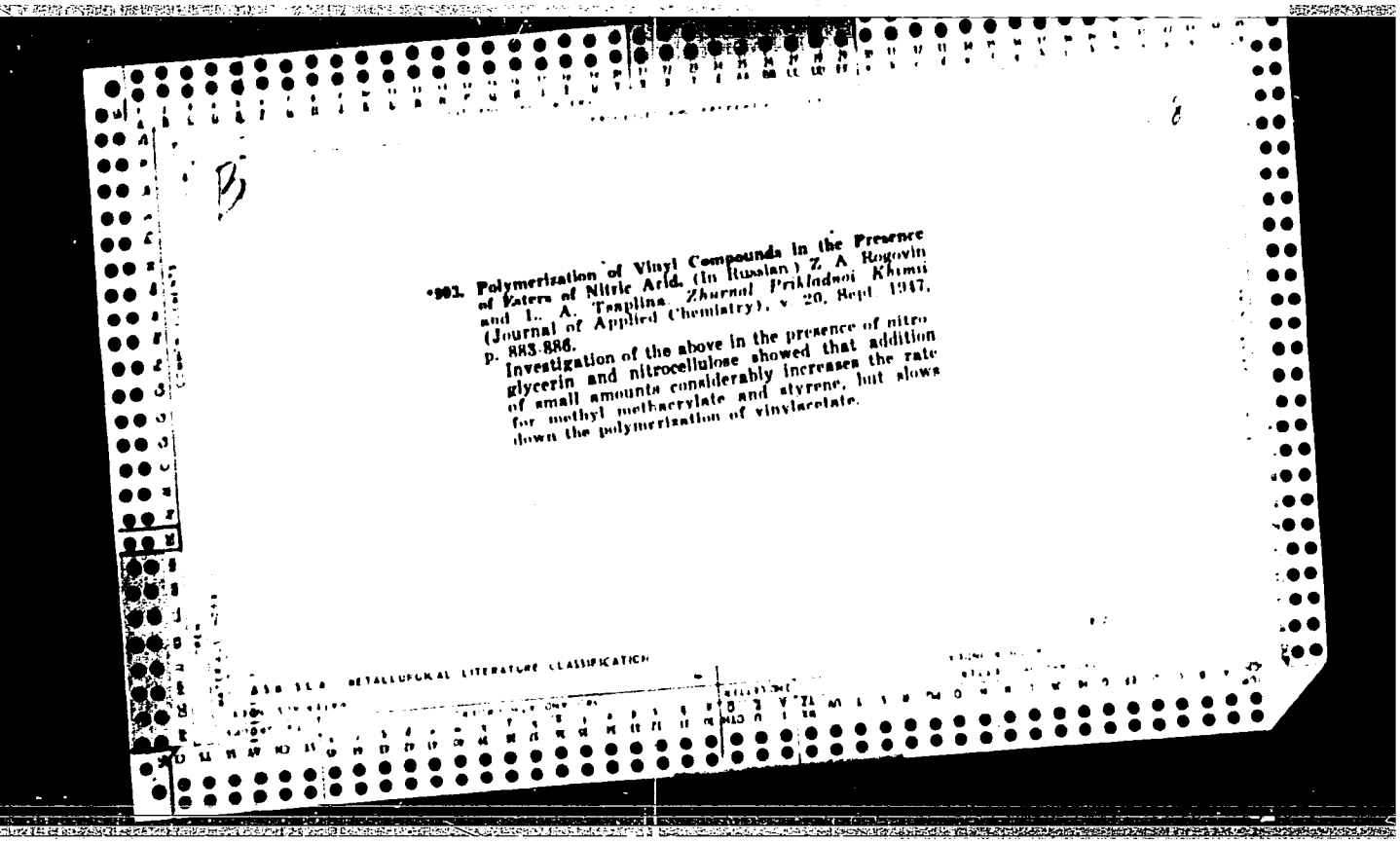


CA

71

Effect of the viscosity of the medium on the polymerization of vinyl compounds. Z. A. Rogovin and L. A. Taplina (Moscow Textile Inst.). *J. Applied Chem. (U.S.S.R.)* 20, 875-82(1947)(in Russian).—Bulk polymerization of $CH_2:CMeCO_2Me$ (I) is accelerated considerably if its viscosity is raised by advance addn. of the polymer; e.g., with 33% polymer (of sp. viscosity 0.8 in 25% Me_2CO soln.) added, at 100°, in the presence of a const. amt. of air, the yields y of polymer after 0.5, 1, and 2 hrs were 53.0, 80.2, and 97.2%, as against 1.3, 7.7, and 36.6% without addn.; the acceleration is thus particularly marked in the initial stages; it is observed both with repptd. and nonrepptd. polymer. That the effect is due solely to increased viscosity η of the medium was demonstrated in runs with equal amts. of polymers of different mol. wts., resulting in media of different η; e.g. with 15% of polymers of sp. η 0.66 and 0.16 (in 25% Me_2CO soln.), after 0.5, 1, 2 hrs., y = 65.0, 90.3, 99.1% and 6.0, 9.9, 16.8%, resp., as against 10.6% after 2 hrs. without addn. of polymer. The nonspecificity of the effect is further demonstrated by the fact that addn. of numerous extraneous polymers (other than the polymer of I) had an equally strong accelerating effect; e.g., with 20% polystyrene, polyisobutylene, nitrocellulose, y (after 3 hrs.) = 97.3, 95.0, 98.0%, as against 16-20% without addn. The accelerating effect is more marked at lower temps. On the other hand, inert polymers which are neither dissolved nor swell in I, not only do not accelerate the polymerization but have an inhibiting effect; thus, with 33% acetylcellulose and sulfite cellulose, y after 3 hrs. reached only 6.2 and 1.0%, resp. Such inhibition by inert polymers was also observed in the polymerization of $CH_2:CHOAc$ (II) and of $PhCH:CH_2$ (III); the former is suppressed altogether by 30% sulfite cellulose, the latter, at 100°, attains, in 10 hrs., y = 4% as against 15.1% without addn. The inhibiting effect is obviously due to increased probability of rupture of chains. The polymer of I, obtained in accelerated polymerization in a medium of higher η, has a higher degree of polymerization; thus, with 0, 5, 10, and 20% polymer added in advance, in 1.5 hrs., y = 15.0, 45.2, 85.1, and 92.9%, and the specific η (in 25% addn. in Me_2CO) of the polymer produced = 1.20, 1.45, 1.35, and 1.40, resp. Consequently, in the case of I, acceleration of polymerization entails no lowering of the degree of polymerization. Higher η of the medium results also in a significant shortening of the induction period; while, in pure I, the induction period (by the constancy of the n) at 80° lasted 2 hrs. in the presence of 10 and 20% ethylcellulose, increase of n set in within 20 min. Possibly, the well-known autocatalysis of the polymerization of I is simply the result of the increasing η. In contrast to I, the rate of polymerization of II is slowed down in a medium of higher η; thus, without addn. and with 20% nitrocellulose, ethylcellulose, polyvinyl acetate, and acetylcellulose, y = 52.9, 7.9, 13.3, 39.9, and 11.7%. Evidently, the factors detg. the rupture

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION



*901. Polymerization of Vinyl Compounds in the Presence of Esters of Nitric Acid. (In Russian.) Z. A. Rogovin and L. A. Tsaplina. *Zhurnal Prikladnoi Khimii* (Journal of Applied Chemistry), v. 20, Sept. 1947, p. 883-886.

Investigation of the above in the presence of nitroglycerin and nitrocellulose showed that addition of small amounts considerably increases the rate for methyl methacrylate and styrene, but slows down the polymerization of vinylacetate.

TSAPLINA, L.A.; DAVANKOV, A.N.; BURAVCHENKO, K.K.

Chromatographic method for the removal of by-products from viscose solutions before the determination of esterification degree of the polymer. Khim.volok. no.3:43-44 '59. (MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (VNIIV).
(Viscose) (Chromatographic analysis)

TSAPLINA, L.A.

Conference on analytical chemistry at the D.I.Mendeleev All-Union Chemical Society. Khim.volok. no.3:75-76 '60. (MIRA 13:7)

(Macromolecular compounds)
(Chemistry, Analytical)

TSAPLIN, M.I., kand.tekhn.nauk

Calculation of the cooling of the disk rotors of gas turbines.
Energomashinostroenie. 11 no.2:45-46 F '65.

(MIRA 18:4)

TSAPINA, V.

Made by rural innovators. Inform.biul.VDNKH no.1:26-27 Ja '65.
(MIRA 18:3)

1. Glavnyy metodist pavil'ona "Mekhanizatsiya i elektrifikatsiya sel'skogo khozyaystva" na Vystavke dostizheniy narodnogo khozyaystva SSSR.

TSAPALINA, V.I.

Distortion of transmission dynamics in the system squeezer -- intermediate channel -- widener. Elektrosviaz' 12 no.1:58-67 Ja '58. (MIRA 11:1)

(Telephone)

TSAPLINA, V.M.

Continuous harvesting of grains and chopped straw. Inform. biul. VDNKH no.9:24-25 '54. (MLRA 7:12)

1. Glavnyy metodist po sel'skokhozyaystvennomu proizvodstvu pavil'ona "Mekhanizatsiya i elektrifikatsiya sel'skogo khozyaystva" na Vystavke dostizheniy narodnogo khozyaystva SSSR.

TSAPLINA, Valentina Mikhaylovna; GOLUBEVA, I.A., red.; RESHETIN, G.V., tekhn. red.

[Exhibition on the subject "Wide-range machinery for grain harvesting and new means for the mechanization of straw harvesting;" guidebook] Tematicheskaia vystavka "Shirokozakhvatnaia tekhnika dlia uborki zernovykh i novye sredstva mekhanizatsii uborki solomy"; putevoditel'. Moskva, 1962. 14 p. (MIRA 16:6)

1. Moscow. Vystavka dostizheniy narodnogo khozyaystva SSSR. (Harvesting machinery--Exhibitions)

TSAPLINA, V.N.; DRESVYANNIKOVA, D.F., metodist; KISELEVA, T.A., metodist; KMET', S.K.

Exhibitions and displays of special items. Inform. biul. VDNKH no.8:25-31 Ag '64. (MIRA 17:11)

1. Glavnyy metodist po sel'skokhozyaystvennomu proizvodstvu pavil'ona "Mekhanizatsiya i elektrifikatsiya sel'skogo khozyaystva" na Vystavke dostizheniy narodnogo khozyaystva SSSR (for TSaplina). 2. Pavil'on "Krupnyy rogatyy skot" na Vystavke dostizheniy narodnogo khozyaystva SSSR (for Dresvyannikova). 3. Pavil'on "Mekhanizatsiya i elektrifikatsiya sel'skogo khozyaystva" na Vystavke dostizheniy narodnogo khozyaystva SSSR (for Kiseleva). 4. Glavnyy veterinarnyy vrach na Vystavke dostizheniy narodnogo khozyaystva SSSR (for Kmet').

TSAPLYUK, O.E.

Maturation and the process of spermatogenesis in male saigas. Trudy Inst. zool. AN Kazakh. SSR 17:222-240 '62. (MIRA 17:2)

TSAPLYUK, V.F.

Clinical statistical data on endemic goiter in the village of Sarkand, Sarkand District, Taldy-Kurgan Province, Kazakh.S.S.R. Izv.AN Kazakh. SSR Ser.khir. no.1:182-186 '47. (MLRA 9:8)

1. Institut klinicheskoy i eksperimental'noy khirurgii Akademii nauk KazSSR.
(SARKAND--GOITER)

TSAPLYUK V. F.

Vitamin deficiency in endemic goiter. V. F. Tsaplyuk. *Vestnik Akad. Nauk Kazakh. S.S.R.* 12, No. 2, 40 of (1956).—Clinical material is presented which shows that in endemic goiter there are often associated deficiencies of vitamins A, B, and C. G. M. Kosolapoff

(1)

NECHIPORENKO, V.G., kand.tekhn.nauk; PRIKHODCHENKO, P.P., inzh.; ZAYTSEV, V.A., inzh.; TSAPOV, V.P., inzh.; VERKHOTUROV, A.D., inzh.

Cutting worm spiral with a variable pitch and profile height of the turn. Mashinostroenie no.6:82-84 N-D '65. (MIRA 18:12)

TOMILIN, A. P.

PHASE I BOOK EXPLOITATION SOV/5742

Akademiya nauk SSSR. Mezhduvedomstvennyy komitet po provedeniyu Mezhdunarodnogo geofizicheskogo goda. VIII rezdel programmy MGG: Shiroty i dolgoty.

Predvaritel'nyye resul'taty issledovaniy kolebaniy shirot i dvizheniya polyusov zemli; sbornik statey (Preliminary Data of Latitude Variations and Migrations of the Earth's Poles; Collected Articles. No. 1) Moscow, Izd-vo AN SSSR, 1960. 97 p. Errata slip inserted. 1,000 copies printed.

PURPOSE: This collection of articles is intended for astronomers, geophysicists, and other scientists concerned with the problem of latitude variations and the migration of the Earth's poles.

COVERAGE: Part I of the collection contains preliminary results of latitude observations from 1957.5 through 1959.0 made at IGY stations in the USSR network, including new stations in Siberia. Part II consists of articles describing new instruments, observational programs and methods, and procedures of processing the latitude observational data. With the larger number of stations and the use of new instruments it is anticipated that the final results will provide a more comprehensive study of anomalies and instrumental

Card 1/5

SOV/5782

Publications of Latitude Work Stations (Cont.)

...es in latitude observations that have been possible previously. No pre-
...condition are mentioned. English abstracts and references follow each article.

TABLE OF CONTENTS:

Card 2/5

Card 3/5

TSAPOVA, A.P.

SOV/5721

Vsesoyuznaya astrometricheskaya konferentsiya.

Trudy 14-y Astrometricheskoy konferentsii SSSR, Kiyev, 27-30 maya 1958 g. (Transactions of the 14th Astrometrical Conference of the USSR, Held in Kiyev 27-30 May 1958) Moscow, Izd-vo AN SSSR, 1960. 440 p. Errata slip inserted. 1000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Glavnaya astronomicheskaya observatoriya (Pulkovo).

Resp. Ed.: M. S. Zverev, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: N. K. Zayenchik; Tech. Ed.: R. A. Zaytseyeva.

PURPOSE: The book is intended for astronomers and astrophysicists, particularly those interested in astrometrical research.

COVERAGE: This publication presents the Transactions of the 14th Astrometrical Conference of the USSR, held in Kiyev 27-30 May 1958. It includes 27 reports and 55 scientific papers presented at the plenary meeting of the Conference

Card 1/16

Transactions of the 14th Astrometrical (Cont.) SOV/5721

and at the special sectional meetings. An appendix contains the resolutions adopted by the Conference, the composition of the committees, the agenda, and the list of participants at the Conference. A brief summary in English is given at the end of each article. References follow individual articles. The Presidium of the Astrometrical Committee (Chairman M. S. Zverev), which supervised the preparation of this publication, expresses thanks to the members of the secretariat: V. M. Vasil'yev, I. G. Kol'chinskiy, A. B. Onegina, and Kh. I. Potter.

TABLE OF CONTENTS:

Card 2/26

TSAPP, R. L.

22510 Tsapp, R. L. Vliyaniye Polimolekulyarnosti Na Deformatsiyu Butilkauchuka. (Sokr. Per Stat'; R. L. Lapp A F. P. Baldwin Iz - Jng. Eng. Chem.-, 38 No. 9, 1946) Per. V. L. Karpov Vysokomolekulyar Soedineniya, VYP. 8, 1949, C 54-58 Bibliogr: S. 58

SO: Letopis' No 30, 1949

TSAPRUN, A.A.

ABRAMOV, I. V.; TSAPRUN, A. A., Cand. of Vet. Sci.; LEBEDEV, E. M., Vet., All-Union Inst. of Exptl. Vet. Med. and the All-Union Sci.-Res. Inst. VS

"The significance of an individual tick in the transmission of the agent of piroplasmosis of horses."

SO: Veterinariya 27(3), 1950, p. 12 TAB CON